

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM

WBS Title: U.S. Department of Energy - Office of Environmental Management (DOE-EM)

Parent WBS: 0

Parent Title: Not Applicable

WBS Level: 1

WBS Level Title: Office Level

Reference Number: EM

Reference Description: DOE Office Designation

WBS Element Scope Description:

The Office of Environmental Management (EM) is responsible for the risk reduction and cleanup of the environmental legacy of the Nation's nuclear weapons program, one of the largest, most diverse, and technically complex environmental programs in the world. EM will successfully achieve this strategic goal by ensuring the safety of DOE employees and U.S. citizens, acquiring the best resources to complete the complex tasks, and by managing projects throughout the United States in the most efficient and effective manner. EM has made significant progress in the last four years in shifting away from risk management to embracing a mission completion philosophy based on cleanup and reducing risk. EM continues to demonstrate the importance of remaining steadfast to operating principles while staying focused on the mission. EM has made progress in recent years in cleanup and/or closure of sites. In addition to its emphasis on site cleanup and closures, EM is also focusing on longer-term activities required for the completion of the cleanup program. These include:

- Constructing and operating facilities to treat radioactive liquid tank waste into a safe, stable form to enable ultimate disposition.
- Securing and storing nuclear material in a stable, safe configuration in secure locations to protect national security.
- Transporting and disposing of transuranic and low-level wastes in a safe and cost-effective manner to reduce risk.

Sub WBS Elements:

WBS No:	WBS Title:
EM.AL	Argonne National Laboratory - East
EM.BC	Consolidated Business Center
EM.BL	Brookhaven National Laboratory
EM.CL	Columbus
EM.CS	California Site Support
EM.ET	Energy Technology Engineering Center
EM.FN	Fernald
EM.HQ	Headquarters
EM.ID	Idaho National Laboratory
EM.IT	Inhalation Toxicology Laboratory
EM.KC	Kansas City Plant
EM.LA	Los Alamos National Laboratory
EM.LB	Lawrence Berkley Laboratory
EM.LL	Lawrence Livermore National Laboratory
EM.MB	Miamisburg Mound
EM.MO	Moab UMTRA Project
EM.NA	NNSA Service Center
EM.NO	Nevada Offsites
EM.NT	Nevada Test Site
EM.OR	Oak Ridge Reservation
EM.PA	Paducah Gaseous Diffusion Plant
EM.PO	Portsmouth Gaseous Diffusion Plant
EM.PX	Pantex Plant
EM.RF	Rocky Flats
EM.RL	Hanford Site - Richland Operations
EM.RP	Hanford Site - Office of River Protection
EM.SL	Stanford Linear Accelerators Center
EM.SN	Sandia National Laboratories
EM.SP	Separations Process Research Unit
EM.SR	Savannah River Site
EM.WP	Carlsbad - Waste Isolation Pilot Plant
EM.WV	West Valley Demonstration Project

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV

Parent WBS: 1

WBS Level: 2

Reference Number: 32

WBS Title: West Valley Demonstration Project

Parent Title: U.S. Department of Energy - Office of Environmental Management (DOE-EM)

WBS Level Title: Complex Level

Reference Description: West Valley Demonstration Project

WBS Element Scope Description:

The West Valley Demonstration Project (WVDP) is a unique operation within the Department of Energy. It came into being through the West Valley Demonstration Project Act of 1980. Under the WVDP Act, the Department is responsible for solidifying the high-level waste, disposing of waste created by the solidification, and decommissioning the facilities used in the process. The land and facilities are not owned by the Department. Rather, the project premises are the property of the New York State Energy Research and Development Authority (NYSERDA) and represents only 200 acres of the larger Western New York Service Center, which is approximately 3,300 acres, also owned by NYSERDA. After DOE's responsibilities under the Act are complete, the Act requires that the premises be returned to New York State. Until that time, the Act requires New York State to pay 10 percent of the Project costs, and the Department pays the remaining 90 percent.

Located about 40 miles south of Buffalo, the WVDP occupies the site of the only commercial nuclear fuel reprocessing facility to have operated in the United States. During commercial operations of the site in the late 1960's and early 1970's, approximately 640 metric tons of spent nuclear fuel was reprocessed. Reprocessing operations were halted between 1972 and 1976 to support facility modifications, but operations never resumed. When DOE became responsible for the site in 1980, approximately 600,000 gallons of liquid high-level waste (HLW) were stored in two single shelled, carbon steel underground tanks.

Since then, DOE has performed waste disposition, decontamination, deactivation, and disposition of facilities, and infrastructure/landlord activities. To date, the Department has complete liquid HLW solidification efforts by solidifying over 600,000 gallons of HLW into 275 canisters. The Department has also shipped and disposed over 1,000,000 cubic feet of low-level waste (LLW).

Sub WBS Elements:

WBS No:

EM.WV.OH-WV-0013

EM.WV.OH-WV-0014

EM.WV.OH-WV-0020

EM.WV.OH-WV-0040

WBS Title:

Solid Waste Stabilization and Disposition

Radioactive Liquid Tank Waste Stabilization

Safeguards & Security

Nuclear Facility D&D

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0013

Parent WBS: EM.WV

WBS Level: 3

Reference Number: 01

WBS Title: Solid Waste Stabilization and Disposition

Parent Title: West Valley Demonstration Project

WBS Level Title: Project Level

Reference Description: OH-WV-0013

WBS Element Scope Description:

Projects Description:

The solid waste stabilization and disposition project at the West Valley Demonstration Project involves the waste management activities required per the West Valley Demonstration Project Act of 1980 associated with identifying disposition pathways and dispositioning low level and transuranic waste produced as a result of high-level waste vitrification readiness and execution. When this project is complete, all generated low-level waste will have been shipped off-site for disposal, reducing worker and environmental risk at the site. Preparations for opening disposition pathways for transuranic waste are underway.

- Life Cycle Cost Profile: \$367.6 M – this cost does NOT include the ARRA Life Cycle Cost of the EM.WV.OH-WV-0013.A001-R project listed below.

Sub WBS Elements:

WBS No:

EM.WV.OH-WV-0013.A001

EM.WV.OH-WV-0013.A001-R

EM.WV.OH-WV-0013.A002

EM.WV.OH-WV-0013.A003

EM.WV.OH-WV-0013.A004

WBS Title:

OH-WV-0013.O1: RH TRU Waste

OH-WV-0013.O2: LLW & CH TRU Waste

OH-WV-0013.O2: CH TRU Waste

OH-WV-0013.O3: MLLW

OH-WV-0013.O4: LLW

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0013.A001

Parent WBS: EM.WV.OH-WV-0013

WBS Level: 4

Reference Number: A001

Program Mission: MLLW & LLW Management

WBS Title: OH-WV-0013.O1: RH TRU Waste

Parent Title: Solid Waste Stabilization and Disposition

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0013 - Solid Waste Stabilization and Disposition

WBS Element Scope Description:

ABB Description:

The solid waste stabilization and disposition project at the West Valley Demonstration Project involves the proper storage and management activities required per the West Valley Demonstration Project Act of 1980 associated with identifying disposition pathways and dispositioning for Remote Handled Transuranic Waste (RH-TRU) produced as a result of high-level waste vitrification readiness and execution. The project requires that all RH-TRU waste be processed to the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria (WAC). For some RH-TRU waste streams, no WIPP WAC exists. Preparations for opening disposition pathways for RH-TRU waste are underway.

- Life Cycle Cost Profile: This life cycle cost is maintained at level 3.
- Defined End State: The project end state requires that all processed and non-processed RH-TRU waste is processed and shipped for final disposition.
- Beginning / End Dates: FY 2008 – FY 2012

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0013.A001-R

Parent WBS: EM.WV.OH-WV-0013

WBS Level: 4

Reference Number: A001-R

Program Mission: MLLW & LLW Management

WBS Title: OH-WV-0013.O1: RH TRU Waste

Parent Title: Solid Waste Stabilization and Disposition

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0013 - Solid Waste Stabilization and Disposition

WBS Element Scope Description:

ABB Description:

The solid waste stabilization and disposition project at the West Valley Demonstration Project involves the waste management activities required per the West Valley Demonstration Project Act of 1980 associated with identifying disposition pathways and dispositioning low level and contact-handled transuranic waste produced as a result of high-level waste vitrification readiness and execution. This Recovery Act Project accelerates the base scope as described above. When this ARRA project is complete in 2011, CH-TRU and LLW Legacy Waste processing will be accelerated supporting PBS-13 project completion.

- Life Cycle Cost Profile: \$3.7 M
- Defined End State: This Recovery Act Project accelerates the base scope of the EM.WV.OH-WV-0013 project listed above.
- Beginning / End Dates: FY 2009 – FY 2011

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0013.A002

Parent WBS: EM.WV.OH-WV-0013

WBS Level: 4

Reference Number: A002

Program Mission: MLLW & LLW Management

WBS Title: OH-WV-0013.O2: CH TRU Waste

Parent Title: Solid Waste Stabilization and Disposition

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0013 - Solid Waste Stabilization and Disposition

WBS Element Scope Description:

ABB Description:

The solid waste stabilization and disposition project at the West Valley Demonstration Project involves the proper storage and management activities required per the West Valley Demonstration Project Act of 1980 associated with identifying disposition pathways and dispositioning for Contact Handled Transuranic Waste (CH-TRU) produced as a result of high-level waste vitrification readiness and execution. The project requires that all CH-TRU waste be processed to the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria (WAC). For some CH-TRU waste streams, no WIPP WAC exists. Preparations for opening disposition pathways for CH-TRU waste are underway.

- Life Cycle Cost Profile: This life cycle cost is maintained at level 3.
- Defined End State: The project end state requires that all processed and non-processed CH-TRU waste is processed and shipped for final disposition.
- Beginning / End Dates: FY 2008 – FY 2012

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0013.A003

Parent WBS: EM.WV.OH-WV-0013

WBS Level: 4

Reference Number: A003

Program Mission: MLLW & LLW Management

WBS Title: OH-WV-0013.O3: MLLW

Parent Title: Solid Waste Stabilization and Disposition

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0013 - Solid Waste Stabilization and Disposition

WBS Element Scope Description:

ABB Description:

The solid waste stabilization and disposition project at the West Valley Demonstration Project involves the waste management activities required per the West Valley Demonstration Project Act of 1980 associated with identifying disposition pathways and dispositioning of Mixed Low Level Waste (MLLW) produced as a result of high-level waste vitrification readiness and execution. This work will also include determination of characterization and packaging needs, data assessment, profile development, work instructions and all final packaging inspections.

- Life Cycle Cost Profile: This life cycle cost is maintained at level 3.
- Defined End State: The project end state requires that all processing and dispositioning of Legacy MLLW will have been performed in compliance with the Site Treatment Plan (STP).
- Beginning / End Dates: FY 2008 – FY 2012

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0013.A004

Parent WBS: EM.WV.OH-WV-0013

WBS Level: 4

Reference Number: A004

Program Mission: MLLW & LLW Management

WBS Title: OH-WV-0013.O4: LLW

Parent Title: Solid Waste Stabilization and Disposition

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0013 - Solid Waste Stabilization and Disposition

WBS Element Scope Description:

ABB Description:

The solid waste stabilization and disposition project at the West Valley Demonstration Project involves the waste management activities required per the West Valley Demonstration Project Act of 1980 associated with identifying disposition pathways and dispositioning of Low Level Waste (LLW) produced as a result of high-level waste vitrification readiness and execution. This work will also include determination of characterization and packaging needs, data assessment, profile development, work instructions and all final packaging inspections.

- Life Cycle Cost Profile: This life cycle cost is maintained at level 3.
- Defined End State: The project end state requires that all processing and dispositioning of Legacy LLW will have been performed.
- Beginning / End Dates: FY 2008 – FY 2012

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0014

Parent WBS: EM.WV

WBS Level: 3

Reference Number: 01

WBS Title: Radioactive Liquid Tank Waste Stabilization

Parent Title: West Valley Demonstration Project

WBS Level Title: Project Level

Reference Description: OH-WV-0014

WBS Element Scope Description:

Project Description:

This PBS includes the activities associated with surveillance, monitoring and maintenance of the West Valley Demonstration Project (WVDP) site and high-level waste (HLW) canisters until such time that the HLW canisters can be transported to a federal repository for permanent disposal. Until disposition to the federal repository is possible, the 275 HLW canisters produced as a result of HLW solidification activities will be monitored and maintained on site in safe interim storage. This project will be complete once the HLW canisters have been safely transported to a federal repository for permanent disposal. Currently the Life Cycle costs assume long-term on-site storage of the canisters until a Federal Repository is identified.

Sub WBS Elements:

WBS No:

EM.WV.OH-WV-0014.A001

WBS Title:

OH-WV-0014.O1: HLW Canister Disposition

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0014.A001

Parent WBS: EM.WV.OH-WV-0014

WBS Level: 4

Reference Number: A001

Program Mission: Tank Waste Management & Disposition

WBS Title: OH-WV-0014.O1: HLW Canister Disposition

Parent Title: Radioactive Liquid Tank Waste Stabilization

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0014 - Radioactive Liquid Tank Waste Stabilization

WBS Element Scope Description:

ABB Description:

This PBS includes the activities associated with surveillance, monitoring and maintenance of the West Valley Demonstration Project (WVDP) site and high-level waste (HLW) canisters until such time that the HLW canisters can be transported to a federal repository for permanent disposal. Until disposition to the repository is possible, the 275 HLW canisters produced as a result of HLW solidification activities will be monitored and maintained on site in safe interim storage. Currently the Life Cycle costs assume long-term on-site storage of the canisters until a Federal Repository is identified.

- Life Cycle Cost Profile: \$407 M
- Defined End State: This project end state requires that all of the HLW canisters have been safely transported to a federal repository for permanent disposal.
- Beginning - End Dates: FY 2020 – FY 2040

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0020

Parent WBS: EM.WV

WBS Level: 3

Reference Number: 01

WBS Title: Safeguards & Security

Parent Title: West Valley Demonstration Project

WBS Level Title: Project Level

Reference Description: OH-WV-0020

WBS Element Scope Description:

Project Description:

The Safeguards and Security Program at the West Valley Demonstration Project includes those activities required to provide Protective Forces, Program Management, and Cyber Security for all project activities in accordance with applicable DOE standards and regulations. The West Valley Demonstration Project safeguards and security program provides for a secure working environment during execution of the Project.

This scope will be considered complete once DOE's mission at the West Valley Demonstration Project is complete, currently estimated at 2040.

The safeguards and security program has successfully maintained access controls and perimeter security of the site, as well as ensured general site security for personnel and information technology systems.

Sub WBS Elements:

WBS No:

EM.WV.OH-WV-0020.A001

WBS Title:

OH-WV-0020.O1: Safeguards and Security

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0020.A001

Parent WBS: EM.WV.OH-WV-0020

WBS Level: 4

Reference Number: A001

Program Mission: Safeguards and Security

WBS Title: OH-WV-0020.O1: Safeguards and Security

Parent Title: Safeguards & Security

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0020 - Safeguards and Security-West Valley

WBS Element Scope Description:

ABB Description:

The Safeguards and Security Program at the West Valley Demonstration Project includes those activities required to provide Protective Forces, Program Management, and Cyber Security for all project activities in accordance with applicable DOE standards and regulations. The West Valley Demonstration Project safeguards and security program provides for a secure working environment during execution of the Project.

The safeguards and security program has successfully maintained access controls and perimeter security of the site, as well as ensured general site security for personnel and information technology systems.

- Life Cycle Cost Profile: \$32.2 M
- Defined End State: This project end state requires that the DOE's mission at the West Valley Demonstration Project be complete, currently estimated at 2040.
- Beginning / End Dates: FY 2008 – FY 2040

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0040

Parent WBS: EM.WV

WBS Level: 3

Reference Number: 01

WBS Title: Nuclear Facility D&D

Parent Title: West Valley Demonstration Project

WBS Level Title: Project Level

Reference Description: OH-WV-0040

WBS Element Scope Description:

Project Description:

The decontamination and decommissioning program at the West Valley Demonstration Project involves those activities required per the West Valley Demonstration Project Act of 1980 to decontaminate and decommission the facilities, tanks and hardware used in connection with the Project. Decommissioning criteria for the West Valley Demonstration Project was established by the U.S. Nuclear Regulatory Commission (NRC) in 2002. Decontamination and decommissioning will be performed to most effectively reduce worker, public and environmental risk at the West Valley Demonstration Project. To support decontamination and decommissioning efforts, this program also involves those activities required to safely manage and maintain the site in compliance with federal and state statutes, as well as DOE orders and mandates. An Environmental Impact Statement was prepared and subsequent Record of Decision for Decommissioning of the West Valley site was issued in April 2010. A Decommissioning Plan for Phase Decommissioning was accepted by NRC in February 2010. Activities through 2040 will be associated with decontaminating, demolishing and/or dismantling Project facilities in order to minimize site surveillance and maintenance requirements associated with maintaining the high-level waste canisters on-site. The high-level waste canisters are currently stored in a cell in the former spent fuel reprocessing facility. They will be moved to a new on-site storage system until a federal repository becomes available.

Sub WBS Elements:

WBS No:

EM.WV.OH-WV-0040.A001

EM.WV.OH-WV-0040.A001-R

EM.WV.OH-WV-0040.C001

EM.WV.OH-WV-0040.C001-R

EM.WV.OH-WV-0040.C002

EM.WV.OH-WV-0040.C003

WBS Title:

OH-WV-0040.O1: Nuclear Facility D&D-West Valley

OH-WV-0040.O1: Nuclear Facility D&D-West Valley

OH-WV-0040.C1: Nuclear Facility -Main Plant D&D

OH-WV-0040.C1: Nuclear Facility -Main Plant D&D

OH-WV-0040.C2: Nuclear Facility D&D -HLW Canister Project

OH-WV-0040.C3: Nuclear Facility D&D -Vitrification Facility Decontamination

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0040.A001

WBS Title: OH-WV-0040.O1: Nuclear Facility D&D-West Valley

Parent WBS: EM.WV.OH-WV-0040

Parent Title: Nuclear Facility D&D

WBS Level: 4

WBS Level Title: Subproject Level

Reference Number: A001

Reference Description:

Program Mission: Facility D&D

PBS: OH-WV-0040 - Nuclear Facility D&D-West Valley

WBS Element Scope Description:

ABB Description:

This project includes the Waste Tank Farm, the North Plateau Plume Mitigation Project, Utilities, and the Balance of Sites Facilities Projects. It also includes Site Operations.

The Waste Tank farm Project will place the Waste Tank Farm in a more stable condition, including removal of residual liquids, and drying interior of the tanks and the tank vaults. For the purpose of the defining this WBS, it is assumed that “close-in place” will be selected for the decommissioning of the Waste Tank Farm, so this WBS element includes grouting the remaining contamination in place. The North Plateau Plume Mitigation involves the construction of a subsoil barrier to prevent the migration of radioactive contamination in the groundwater. Site Operations provides heat and water, electrical service and ventilation to all site buildings and systems. Site Operations is also responsible for the control of emissions to air and water, as well as, maintenance services for all equipment used in all site decommissioning activities.

- Life Cycle Cost Profile: \$156.9 M
- Defined End State: This project end state requires that the Waste Tank Farm be closed-in-place and a subsoil barrier at the North Plateau Plume be in place to prevent further groundwater contamination.
- Beginning / End Dates: FY 2008 – FY 2020

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0040.A001-R

WBS Title: OH-WV-0040.O1: Nuclear Facility D&D-West Valley

Parent WBS: EM.WV.OH-WV-0040

Parent Title: Nuclear Facility D&D

WBS Level: 4

WBS Level Title: Subproject Level

Reference Number: A001-R

Reference Description:

Program Mission: Facility D&D

PBS: OH-WV-0040 - Nuclear Facility D&D-West Valley

WBS Element Scope Description:

ABB Description:

This project consists of two smaller projects, installation of a North Plateau Plume permeable treatment wall and installation of the tank and vault drying system. Both projects are supported by the regulatory agencies involved in the WVDP and are components of the EIS preferred alternative defined in the recently issued EIS / Record of Decision (April 2010).

The Tank and Vault Drying project will support maintaining the tank farm tanks and vaults in a safe dry condition for an extended period (up to 10 years) until a final closure decision can be made by DOE. DOE used the Core Team process to reach consensus with Regulators and NYSERDA on this action. The North Plateau Plume project, which involves installation of a permeable treatment wall to mitigate the Sr-90 release, was also a decision reached with NYSERDA and regulators using the same Core Team process. The design of the PTW is such that its life expectancy is anticipated to be 15 – 20 years before break through occurs.

- Life Cycle Cost Profile: \$33.4 M
- Defined End State: This Recovery Act Project accelerates the base scope of the EM.WV.OH-WV-0040.C001 project listed above.
- Beginning / End Dates: FY 2009 – FY 2011

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0040.C001

Parent WBS: EM.WV.OH-WV-0040

WBS Level: 4

Reference Number: C001

Program Mission: Facility D&D

WBS Title: OH-WV-0040.C1: Nuclear Facility -Main Plant D&D

Parent Title: Nuclear Facility D&D

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0040 - Nuclear Facility D&D-West Valley

WBS Element Scope Description:

ABB Description:

In order to achieve demolition readiness, the Main Plant Process Building (MPPB) is to have its vessels, equipment, piping, and conduit removed; interior surfaces decontaminated; and the building made cold, dark, and dry; except for those portions that will remain to contain the site's High Level Waste Storage System. The MPPB contained the systems that were once used to reprocess spent nuclear fuel. Some of the building's processing cells are heavily contaminated and can only be decommissioned by remote operations. Other cells will be decommissioned by manned entries involving the potential for significant external dose or very high airborne contamination. The building is estimated to contain about 22,000 Curies of activity, 16,500 of which are to be removed in this phase of the project. The building also contains significant amounts of asbestos insulation, which will also be removed.

- Life Cycle Cost Profile: \$9.2 M
- Defined End State: The project end state requires that the MPPB be made cold and dark except for the portions that store the HLW canisters. This includes all interior surfaces, vessels, equipment and conduit removed.
- Beginning / End Dates: FY 2008 – FY 2011

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0040.C001-R

Parent WBS: EM.WV.OH-WV-0040

WBS Level: 4

Reference Number: C001-R

Program Mission: Facility D&D

WBS Title: OH-WV-0040.C1: Nuclear Facility -Main Plant D&D

Parent Title: Nuclear Facility D&D

WBS Level Title: Subproject Level

Reference Description:

PBS: OH-WV-0040 - Nuclear Facility D&D-West Valley

WBS Element Scope Description:

ABB Description:

In order to achieve demolition readiness, the Main Plant Process Building (MPPB) is to have its vessels, equipment, piping, and conduit removed; interior surfaces decontaminated; and the building made cold, dark, and dry; except for those portions that will remain to contain the site's High Level Waste Storage System. The MPPB contained the systems that were once used to reprocess spent nuclear fuel. Some of the building's processing cells are heavily contaminated and can only be decommissioned by remote operations. Other cells will be decommissioned by manned entries involving the potential for significant external dose or very high airborne contamination. The building is estimated to contain about 22,000 Curies of activity, 16,500 of which are to be removed in this phase of the project. The building also contains significant amounts of asbestos insulation, which will also be removed.

This work was originally planned to be performed in 2008 and 2009. However, due to changes in DOE priorities, and less than anticipated funding, the project schedule was moved into 2012. In addition, to support more efficient demolition of the MPPB in OH-WV-0040.C3, additional decontamination was determined to be necessary. This scope of work is intended is to accelerate completion of the OH-WV-0040.C1 scope of work, and conduct additional decontamination of the MPPB.

- Life Cycle Cost Profile: \$36.8 M
- Defined End State: This Recovery Act Project accelerates the base scope of the EM.WV.OH-WV-0040.C001 listed above.
- Beginning / End Dates: FY 2009 – FY 2011

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0040.C002

WBS Title: OH-WV-0040.C2: Nuclear Facility D&D -HLW Canister Project

Parent WBS: EM.WV.OH-WV-0040

Parent Title: Nuclear Facility D&D

WBS Level: 4

WBS Level Title: Subproject Level

Reference Number: C002

Reference Description:

Program Mission: Facility D&D

PBS: OH-WV-0040 - Nuclear Facility D&D-West Valley

WBS Element Scope Description:

ABB Description:

As part of the WVDP Act, DOE is to Decontaminate and Decommission, in accordance with Nuclear Regulatory Commission (NRC) requirements, the tanks and other facilities of the Center in which the HLW was stored, the facilities used in the solidification of the waste, and any material and hardware used in connection with the project. To that end, DOE has issued an Environmental Impact Statement Record of Decision (April 2010) with a preferred alternative to demolish and remove the Main Plant Process Building (MPPB). In order to perform this work, the 275 HLW canisters currently stored in the MPPB will have to be relocated to a new (to be constructed) HLW canister storage facility. This project is the design and construction of a new HLW canister storage facility.

- Life Cycle Cost Profile: \$117.4 M
- Defined End State: The project end state requires that all HLW canisters be relocated from the MPPB to a newly constructed canister storage facility.
- Beginning / End Dates: FY 2012 – FY 2020

Corporate Work Breakdown Structure (WBS) Dictionary

WBS Information:

WBS No.: EM.WV.OH-WV-0040.C003

WBS Title: OH-WV-0040.C3: Nuclear Facility D&D -
Vitrification Facility Decontamination

Parent WBS: EM.WV.OH-WV-0040

Parent Title: Nuclear Facility D&D

WBS Level: 4

WBS Level Title: Subproject Level

Reference Number: C003

Reference Description:

Program Mission: Facility D&D

PBS: OH-WV-0040 - Nuclear Facility D&D-West Valley

WBS Element Scope Description:

ABB Description:

This WBS element includes the scope for the demolition of the Main Plant Processing Building (MPPB) and the Vitrification Facility (VF) at WVDP. The scope of the demolition for both structures includes removal of all slabs and foundations to grade level. This estimate assumes that conventional demolition methods (i.e., tracked excavators fitted with universal processor, hydraulic shear, bucket & thumb, and pneumatic hammer attachments) will be utilized to the extent practical. All waste and debris generated shall be characterized, containerized and shipped offsite in accordance with all applicable laws and regulations, and must meet the waste acceptance criteria (WAC) for the intended disposal facility.

- Life Cycle Cost Profile: \$60.6 M
- Defined End State: The project end state requires that the MPPB and VF structures be completely demolished to grade level.
- Beginning / End Dates: FY 2012 – FY 2020